## Message

From: Vulimiri, Suryanarayana [Vulimiri.Sury@epa.gov]

**Sent**: 11/5/2013 3:38:26 PM

To: Kraft, Andrew [Kraft.Andrew@epa.gov]; Subramaniam, Ravi [Subramaniam.Ravi@epa.gov]; Schlosser, Paul

[Schlosser.Paul@epa.gov]; Ball, James [ball.james@epa.gov]; Glenn, Barbara [Glenn.Barbara@epa.gov]

Subject: RE: Endogenous formaldehyde- defining what is still outstanding; Call in Ex. 6 Personal Privacy (PP)

Attachments: Formaldehyde TK092613.docx

Hi Andrew,

Here is the latest version. I have not addressed all the reviewers' comments yet. So there are some gaps.



Formaldehyde TK092613.docx

For convenience and to avoid unexpected crashes of my word and EndNote files, I put the TK (ADME) as a separate file.

I will go through the draft again to identify the issues that might need team's help. I will send this info tomorrow before lunch.

Sury

From: Kraft, Andrew

Sent: Tuesday, November 05, 2013 8:19 AM

To: Vulimiri, Suryanarayana; Subramaniam, Ravi; Schlosser, Paul; Ball, James; Glenn, Barbara

Subject: RE: Endogenous formaldehyde- defining what is still outstanding; Call in Ex. 6 Personal Privacy (PP)

Please send me the latest version.

We will be having the meeting on Thursday (with different players), but there is no reason you need to have all revisions completed—this is to identify the "big picture" interpretations and descriptions that still need beefing up. You shouldn't need to spend any time making things perfect, but it would be helpful if you can identify which issues you are having the most difficulty addressing, so that we can get you some assistance, if needed. I have a feeling the exhaled breath is fine; if we decide otherwise, I will loop John in... I'm hoping to keep the list of attendees to a minimum.

Thanks, Sury.

-Andrew

From: Vulimiri, Suryanarayana

Sent: Tuesday, November 05, 2013 8:03 AM

To: Subramaniam, Ravi; Kraft, Andrew; Schlosser, Paul; Ball, James; Glenn, Barbara

**Subject:** RE: Endogenous formaldehyde- defining what is still outstanding; Call in **Ex. 6 Personal Privacy (PP)** 

Andrew,

I saw you cancelled the meeting for this Thursday. It seems Ravi may not be able to attend. Next week will be ideal for me too. It gives me some time to address the comments from the last round of reviewers on ADME and finalize the draft. Also, this week I am tied up working with the GeneTox part. Also, I would like to include John Whalan for the endogenous meeting who authored the 'exhaled formaldehyde' part. Also, note that the version attached is not the latest.

From: Subramaniam, Ravi

Sent: Monday, November 04, 2013 6:15 PM

To: Kraft, Andrew; Schlosser, Paul; Ball, James; Vulimiri, Suryanarayana; Glenn, Barbara.....

**Subject:** RE: Endogenous formaldehyde- defining what is still outstanding; Call in **Ex. 6 Personal Privacy (PP)** 

## Andrew:

I am not sure if I can attend this meeting. Regardless, I have yet to provide a revised version of the write-up pertaining to the adduct stuff that incorporates response to review comments, so circulating the old version is not helpful. For now, you can leave this out of the meeting or I can just take you all through (if I am able to attend) how I propose to revise. Note that the pbpk stuff in what you have circulated is also the old version.

I also propose that you invite Paul White since he has been active with the previous meetings on this.

Ravi.

----Original Appointment----

From: Kraft, Andrew

Sent: Monday, November 04, 2013 5:41 PM

To: Schlosser, Paul; Ball, James; Vulimiri, Suryanarayana; Subramaniam, Ravi<u>; Glenn. Barbara</u>

Subject: Endogenous formaldehyde- defining what is still outstanding; Call in Ex. 6 Personal Privacy (PP)

When: Thursday, November 07, 2013 1:00 PM-2:00 PM (GMT-05:00) Eastern Time (US & Canada).

Where: DCRoomPYN7771-North/ORD-NCEA-DC

compile what was previously discussed, what was resolved, and what is still needed to complete this section.

A version from September is attached (thanks, Sury!), which incorporates many of the group's comments/ discussions (see Section B.2). I have also included what was done for methanol. A couple of example questions to consider (some/many of which are probably completely addressed):

- Does it clearly articulate our perspective on systemic delivery of formaldehyde?
- Does it outline the uncertainties associated with potential differences between formaldehyde derived endogenously versus from inhaled formaldehyde? Are there any known or potential differences, or is formaldehyde just formaldehyde, regardless of where it comes from?
- Does it characterize what is known about reactivity of formaldehyde (with GSH, etc.) in the free versus "bound" state, and the implications of this knowledge for characterizing risk?
- Is a clear explanation provided for the exhaled breath studies' limitations and what we conclude about levels in exhaled breath?
- To the extent possible, does it explain the reliability and interpretability of the adduct data? Does it address the
  elephant in the room: namely, how to explain the high endogenous adducts, as compared to the exogenous
  adducts, in the nasal epithelium... or what the relatively small increase in exogenous means?

<< File: FormaldehydeAppendixdraft070113forREVIEW091013.docx >> << File: Discussion of endogenous in methanol assessment.docx >>